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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,191	12/15/2003	Kimmo Mylly	915-007.68	5502
4955	7590	02/23/2006	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			FRANKLIN, RICHARD B	
			ART UNIT	PAPER NUMBER
			2181	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/737,191	Applicant(s) MYLLY ET AL.	
	Examiner Richard Franklin	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/19/04, 01/09/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 15 have been examined.

Drawings

2. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 14 and 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

While Applicant has not provided an explicit and deliberate definition in the specification or explicitly stated in the claim that the "software program product" is the combination of the software code and a computer readable medium in which the software is stored, the claim when taken as a whole is not believed to reasonably be

interpreted as software, per se, since it states that the software code is stored in the software program product. However, it's unclear whether Applicant intends for the product to reasonably be interpreted by one of ordinary skill in the art as a signal, wave or other form of energy. If so, the claim covers an embodiment that fails to include patent-eligible subject matter, since signals waves or other forms of energy are not deemed to fall within a statutory category of invention. Given this confusion, the claim is considered indefinite under 35 U.S.C. 112, 2nd, and non-statutory under 35 U.S.C. 101. Clarification of Applicant's intent and/or correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 – 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 1, 2, 11, 12, and 13 recite the limitation "a time required" in Page 21 Line 12, 16, and 18, Page 23 Lines 15, 16, and 25, and Page 24 Lines 5, 15, and 18. There is insufficient antecedent basis for this limitation in the claim. It is not clear if the limitation refers to the "time required" as previously recited in the claim or a new "time required."

The examiner is interpreting the limitation as referring to the limitation previously recited in the claim.

6. Claims 1, 2, 4, and 11, and 13 recite the limitation "an initialization" in Page 21 Lines 13, 16, 17, 19, 31, and 32, Page 23 Line 17, and Page 24 Lines 16 and 19. There is insufficient antecedent basis for this limitation in the claim. It is not clear if the limitation refers to the "initialization" as previously recited in the claim or a new "initialization."

The examiner is interpreting the limitation as referring to the limitation previously recited in the claim.

7. As per Claims 7 – 10, the use of the trademark MultimediaCard Association™ as a limitation of the claim to identify or describe a particular product renders the claim indefinite. The claim scope is uncertain since the trademark cannot be used properly to identify any particular material or product. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). See also MPEP § 2175.05(u).

8. Claims 12 and 13 recite the limitation "a respective initialization" in Page 23 Line 26 and Page 24 Line 6. There is insufficient antecedent basis for this limitation in the claim. It is not clear if the limitation refers to the "respective initialization" as previously recited in the claim or a new "respective initialization."

The examiner is interpreting the limitation as referring to the limitation previously recited in the claim.

9. Claim 12 recites the limitation "a host device" in Page 23 Line 28. There is insufficient antecedent basis for this limitation in the claim. It is not clear if the limitation refers to the "host device" as previously recited in the claim or a new "host device."

The examiner is interpreting the limitation as referring to the limitation previously recited in the claim.

10. As per claims 14 and 15, while Applicant has not provided an explicit and deliberate definition in the specification or explicitly stated in the claim that the "software program product" is the combination of the software code and a computer readable medium in which the software is stored, the claim when taken as a whole is not believed to reasonably be interpreted as software, per se, since it states that the software code is stored in the software program product. However, it's unclear whether Applicant intends for the product to reasonably be interpreted by one of ordinary skill in the art as a signal, wave or other form of energy. If so, the claim covers an embodiment that fails to include patent-eligible subject matter, since signals waves or other forms of energy are not deemed to fall within a statutory category of invention. Given this confusion, the claim is considered indefinite under 35 U.S.C. 112, 2nd, and non-statutory under 35 U.S.C. 101. Clarification of Applicant's intent and/or correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1 – 3 and 11 – 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Vander Kamp et al. US Patent No. 6,233,625 (hereinafter Vander Kamp).

As per claim 1, Vander Kamp teaches a system with a host device and at least one peripheral device who interact with each other, the system comprising: transmitting information indicative of a time required for an initialization (Optimal Idle Time, Spin-Up Time) of the peripheral device from the peripheral device to the host device (Figure 2 Item 34, Col 6 Lines 1 – 19); and evaluating in the host the information indicative of the time required by the peripheral device for initialization (Figure 4 Item 52, Col 8 Lines 1 – 11).

As per claim 2, Vander Kamp teaches wherein the time required for an initialization of the peripheral device is a maximum under regular circumstances (Col 5 Lines 59 – 65).

As per claim 3, Vander Kamp teaches wherein at least one peripheral device transmits the information to the host device upon a predetermined command received from the host device (Figure 2 Item 32, Figure 4 Item 52, Col 6 Lines 5 – 19).

As per claim 11, Vander Kamp teaches a host device comprising an interface for interfacing with at least one peripheral device (Figure 1 Item 14, Col 5 Lines 14 – 16); and a control component for receiving from at least one peripheral device via the interface an information indicative of a time required by the device for an initialization and for evaluating the received information (Figure 1 Item 12).

As per claim 12, Vander Kamp teaches a peripheral device comprising an interface for interacting with a host device (Figure 1 Item 22); a storing component storing information indicative of a time required at the peripheral device for a respective initialization (Col 5 Line 59 – Col 6 Line 2); and a controlling component for retrieving information indicative of a time required at the device for initialization from the storing component and for transmitting the information via the interface to a host device (Figure 1 Item 28).

As per claim 13, Vander Kamp teaches a system comprising a host device and at least one peripheral with a peripheral device including a first interface for interacting with a host device (Figure 1 Item 22); a storing component storing information indicative of a time required at the peripheral device for a respective initialization (Col 5 Line 59 – Col 6 Line 2); and a controlling component for retrieving information indicative of a time required at the device for initialization from the storing component and for transmitting the information via the first interface to a host device (Figure 1 Item 28); and a host

device including a second interface for interfacing with at least one peripheral device (Figure 1 Item 14, Col 5 Lines 14 – 16); and a control component for receiving from at least one peripheral device via the second interface an information indicative of a time required by the device for an initialization and for evaluating the received information (Figure 1 Item 12)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vander Kamp et al. US Patent No. 6,233,625 (hereinafter Vander Kamp) as applied to claims 1 – 3 and 11 – 13 above in view of Crittenden et al. US Patent No. 5,566,351 (hereinafter Crittenden).

As per claim 4, Vander Kamp teaches the system as described per claim 1 above (See rejection of claim 1).

Vander Kamp does not teach wherein the host device evaluates the information for adapting a polling frequency which is to be employed for the polling at least one peripheral device on whether the device has completed an initialization.

Crittenden teaches wherein the host device evaluates the information for adapting a polling frequency which is to be employed for the polling at least one

peripheral device on whether the device has completed an initialization (Crittenden; Col 5 Lines 14 – 21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Vander Kamp to include the adaptive polling frequency because it allows the system to maximize data throughput by not permitting excessive sleep periods and simultaneously minimize central processing unit (CPU) load by avoiding excessive polling (Crittenden; Col 5 Lines 26 – 29).

As per claim 5, Vander Kamp teaches the system as described per claim 1 above (See rejection of claim 1).

Vander Kamp does not teach wherein the one peripheral device comprises at least two devices, each transmitting information indicative of the time required for its own initialization to the host device, wherein the information is combined to information indicating a time which is required at the most be any of the devices for its respective initialization, and wherein the host device evaluated the combined information.

Crittenden teaches wherein the one peripheral device comprises at least two devices, each transmitting information indicative of the time required for its own initialization to the host device, wherein the information is combined to information indicating a time which is required at the most be any of the devices for its respective initialization, and wherein the host device evaluated the combined information (Crittenden; Col 5 Lines 14 – 21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Vander Kamp to include combining the initialization times because it allows the system to maximize data throughput by not permitting excessive sleep periods and simultaneously minimize central processing unit (CPU) load by avoiding excessive polling (Crittenden; Col 5 Lines 26 – 29).

13. Claims 6 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vander Kamp et al. US Patent No. 6,233,625 (hereinafter Vander Kamp) as applied to claims 1 – 3 and 11 – 13 above in view of The MultiMediaCard System Specification Version 3.31 by the MMCA Technical Committee (hereinafter MMCA).

As per claim 6, Vander Kamp teaches wherein the peripherals are disk drives (See rejection for claim 1).

Vander Kamp does not teach wherein the peripheral is a memory card.

MMCA teaches the use of memory cards as storage devices (MMCA; Page 11 Paragraph 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Vander Kamp because the use of memory cards allows for low costs data storage that covers a large area of applications (MMCA; Page 11 Paragraph 1).

As per claim 7 – 10, Vander Kamp teaches wherein the system is a disk drive system (See rejection for claim 1).

Vander Kamp does not teach wherein the peripheral is a MultiMediaCard system defined in the MultiMediaCard Association Standard.

MMCA teaches the use of a MultiMediaCard as a storage device (MMCA; Page 11 Paragraph 1); the peripheral device transmits the information to the host device upon receipt of a CMD1 command from the host device (MMCA; Page 81 Section 6.3 Power Up); the peripheral device retrieves the information from an operating condition register (OCR) of the peripheral device (MMCA; Page 67 Section 5.1 OCR Register); and the peripheral device transmits the information in an R3 response to the host device (MMCA; Pages 53 – 55 Section 4.9 Responses).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Vander Kamp because the use of memory cards allows for low costs data storage that covers a large area of applications (MMCA; Page 11 Paragraph 1).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Franklin whose telephone number is (571) 272-0669. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard Franklin
Patent Examiner
Art Unit 2181



KIM HUYNH
SUPERVISORY PATENT EXAMINER

2/15/06